

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2001-NM-376-AD; Amendment 39-13456; AD 2004-03-12]

RIN 2120-AA64

Airworthiness Directives; Aerospatiale Model ATR72 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Aerospatiale Model ATR72 series airplanes, that currently requires initial and repetitive inspections to detect fatigue cracking in certain areas of the fuselage, and corrective actions if necessary. For certain airplanes, this amendment requires a new inspection for oversized fastener holes and cracking, and repair if necessary. The actions specified by this AD are intended to prevent fatigue cracking of the fuselage and the passenger and service doors, which could result in reduced structural integrity of the airplane. This action is intended to address the identified unsafe condition.

DATES: Effective March 15, 2004.

The incorporation by reference of a certain publication, as listed in the regulations, is approved by the Director of the Federal Register as of March 15, 2004.

The incorporation by reference of certain other publications, as listed in the regulations, was approved previously by the Director of the Federal Register as of April 3, 2000 (65 FR 10381, February 28, 2000).

ADDRESSES: The service information referenced in this AD may be obtained from Aerospatiale, 316 Route de Bayonne, 31060 Toulouse, Cedex 03, France. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Tony Jopling, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2190; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 2000-04-13, amendment 39-11596 (65 FR 10381, February 28, 2000), which is applicable to certain Aerospatiale Model ATR72 series airplanes, was published in the Federal Register on November 28, 2003 (68 FR 66772). The action proposed to continue to require initial and repetitive inspections to detect fatigue cracking in certain areas of the fuselage, and corrective actions if necessary. For certain airplanes, that action also proposed to require repair of oversized fastener holes.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

There are approximately 39 airplanes of U.S. registry that will be affected by this AD.

The actions that are currently required by AD 2000-04-13 are as follows:

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-52-1018 (14 U.S.-registered airplanes), it takes approximately 250 work hours per airplane to accomplish the required actions, at an average labor rate of \$65 per work hour. Required parts will cost approximately \$9,880 per airplane. Based on these figures, the cost impact of these actions required by this AD on U.S. operators is estimated to be \$365,820, or \$26,130 per airplane.

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-53-1013, Revision 2 (2 U.S.-registered airplanes), it will take approximately 3 work hours per airplane to accomplish the required actions, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of these actions required by this AD on U.S. operators is estimated to be \$390, or \$195 per airplane.

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-53-1019, Revision 2 (2 U.S.-registered airplanes), it will take approximately 100 work hours per airplane to accomplish the required actions, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of these actions required by this AD on U.S. operators is estimated to be \$13,000, or \$6,500 per airplane.

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-52-1028 (2 U.S.-registered airplanes), it will take approximately 5 work hours per airplane to accomplish the required actions, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of these actions required by this AD on U.S. operators is estimated to be \$650 or \$325 per airplane, per inspection cycle.

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-52-1033, and ATR72-52-1029, Revision 1 (2 U.S.-registered airplanes), it will take approximately 145 work hours per airplane to accomplish the required door stop fitting replacement, at an average labor rate of \$65 per work hour. Required parts are provided by the manufacturer at no cost to the operators. Based on these figures, the cost impact of the stop fittings replacement required by this AD on U.S. operators is estimated to be \$18,850 or \$9,425 per airplane.

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-53-1021, Revision 1 (2 U.S.-registered airplanes) it will take approximately 30 work hours per airplane to accomplish the proposed actions, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of these actions required by this AD on U.S. operators is estimated to be \$3,900, or \$1,950 per airplane.

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-53-1014, Revision 2 (2 U.S.-registered airplanes), it will take approximately 8 work hours per airplane to accomplish the required actions, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of these actions required by this AD on U.S. operators is estimated to be \$1,040, or \$520 per airplane.

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-53-1020 (14 U.S.-registered airplanes), it will take approximately 6 work hours per airplane to accomplish the required actions, at an average labor rate of \$65 per work hour. Based on these figures, the cost impact of these actions required by this AD on U.S. operators is estimated to be \$5,460, or \$390 per airplane.

The new actions required by this AD are as follows:

For airplanes identified in Avions de Transport Regional Service Bulletin ATR72-52-1018, Revision 1, accomplishment of the new actions, if required, will take approximately 250 work hours per airplane to accomplish, at an average labor rate of \$65 per work hour. Required parts will cost approximately \$9,880 per airplane. Based on these figures, the cost impact of the new actions required by this AD on U.S. operators is estimated to be \$26,130 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39–AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§39.13 [Amended]

2. Section 39.13 is amended by removing amendment 39-11596 (65 FR 10381, February 28, 2000), and by adding a new airworthiness directive (AD), amendment 39-13456, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2004-03-12 Aerospatiale: Amendment 39-13456. Docket 2001-NM-376-AD. Supersedes AD 2000-04-13, Amendment 39-11596.

Applicability: Model ATR72 series airplanes; certificated in any category; listed in the following Avions de Transport Regional Service Bulletins:

- ATR72-52-1018, dated May 18, 1995;
- ATR72-52-1018, Revision 1, dated March 13, 2001;
- ATR72-52-1028, dated July 5, 1993;
- ATR72-52-1029, Revision 1, dated November 16, 1994;
- ATR72-52-1033, dated April 28, 1995;
- ATR72-53-1013, Revision 2, dated March 22, 1993;
- ATR72-53-1014, Revision 2, dated October 15, 1992;
- ATR72-53-1019, Revision 2, dated October 15, 1996;
- ATR72-53-1020, dated October 6, 1992; and
- ATR72-53-1021, Revision 1, dated February 20, 1995.

Compliance: Required as indicated, unless accomplished previously.

To prevent fatigue cracking of the fuselage and the passenger and service doors, which could result in reduced structural integrity of the airplane, accomplish the following:

Restatement of Requirements of AD 2000-04-13

Inspections/Corrective Actions

(a) For airplanes on which Aerospatiale Modification 03191 (reference Avions de Transport Regional Service Bulletin ATR72-52-1018) has not been accomplished as of April 3, 2000 (the effective date of AD 2000-04-13, amendment 39-11596); prior to the accumulation of 27,000 total flight cycles, or within 30 days after April 3, 2000: Perform a preliminary inspection of the existing fasteners to determine if the fasteners are out of tolerance in accordance with paragraph 2.C.(1) of the Accomplishment Instructions of Avions de Transport Regional Service Bulletin ATR72-52-1018, dated May 18, 1995. Depending on the results of the inspection, prior to further flight, accomplish the requirements in paragraphs (a)(1) and (a)(2), or (a)(2) and (a)(3) of this AD, as applicable.

(1) Remove the fasteners and inspect the fastener holes to determine if they are out of tolerance or cracking, in accordance with Part A of the Accomplishment Instructions of the service bulletin. Perform a visual inspection of the holes for correct tolerance, and a high frequency eddy current (HFEC) inspection for cracking, in accordance with the service bulletin.

(i) If any discrepancy is detected, prior to further flight, repair in accordance with Part C of the Accomplishment Instructions of the service bulletin.

(ii) If no discrepancy is detected, prior to further flight, replace the cargo compartment door hinges with new hinges in accordance with Part A of the Accomplishment Instructions of the service bulletin.

(2) Remove the existing fasteners and inspect the fastener holes for correct tolerance in accordance with Part B of the Accomplishment Instructions of the service bulletin.

(i) If any discrepancy is detected, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate; or the Direction Générale de l'Aviation Civile (DGAC) (or its delegated agent).

(ii) If no discrepancy is detected, prior to further flight, replace the cargo compartment door hinges with new hinges in accordance with Part B of the Accomplishment Instructions of the service bulletin.

(3) Remove the existing fasteners, repair, and replace the cargo compartment door hinges with new hinges in accordance with Part C of the Accomplishment Instructions of the service bulletin.

(b) For airplanes having serial numbers 108 through 210 inclusive: Prior to the accumulation of 36,000 total flight cycles, or within 1 month after April 3, 2000, whichever occurs later, perform a one-time visual inspection to determine if rivets are installed in the key holes located on main frames 25 and 27 of the fuselage, between stringers 14 and 15, in accordance with Avions de Transport Regional Service Bulletin ATR72-53-1013, Revision 3, dated January 22, 1999.

(1) If all rivets are installed, no further action is required by paragraph (b) of this AD.

(2) If any rivet is missing, prior to further flight, perform an eddy current inspection of the affected key holes to detect cracks, in accordance with the service bulletin.

(i) If no crack is detected during the inspection required by paragraph (b)(2) of this AD, prior to further flight, install rivets in all affected key holes, in accordance with the service bulletin. If installation of rivets is not possible, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(ii) If any crack is detected during the inspection required by paragraph (b)(2) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(c) For airplanes having serial numbers 108 through 207 inclusive: Prior to the accumulation of 36,000 total flight cycles, or within 1 month after April 3, 2000, whichever occurs later, perform a one-time visual inspection to determine if rivets are installed in the tooling and key holes located on the standard frames of the fuselage, in accordance with Avions de Transport Regional Service Bulletin ATR72-53-1019, Revision 3, dated January 22, 1999.

(1) If all rivets are installed, no further action is required by paragraph (c) of this AD.

(2) If any rivet is missing, prior to further flight, perform a visual inspection of the affected tooling and key holes to detect cracks, in accordance with the service bulletin.

(i) If no crack is detected during the inspection required by paragraph (c)(2) of this AD, prior to further flight, install new rivets in all affected tooling and key holes, in accordance with the service bulletin.

(ii) If any crack is detected during the inspection required by paragraph (c)(2) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(d) For airplanes on which Aerospatiale Modification 03775 (reference Avions de Transport Regional Service Bulletin ATR72-52-1029, Revision 1, dated November 16, 1994) or Aerospatiale Modification 03776 (reference Avions de Transport Regional Service Bulletin ATR72-52-1033, dated April 28, 1995) has not been accomplished as of April 3, 2000: Prior to the accumulation of 12,000 total flight cycles, or within 1 month after April 3, 2000, whichever occurs later, perform an

eddy current inspection to detect cracks in the plug door stop fittings of the forward and aft passenger and service doors, in accordance with Avions de Transport Regional Service Bulletin ATR72-52-1028, dated July 5, 1993.

(1) If no crack is detected, repeat the eddy current inspection required by paragraph (d) of this AD thereafter at intervals not to exceed 6,000 flight cycles.

(2) If any crack is detected, prior to further flight, replace the cracked stop fittings with new, improved fittings, in accordance with Avions de Transport Regional Service Bulletin ATR72-52-1033, dated April 28, 1995; or ATR72-52-1029, Revision 1, dated November 16, 1994; as applicable. Accomplishment of the replacement constitutes terminating action for the repetitive inspection requirements of paragraph (d)(1) of this AD for that fitting.

(e) For airplanes on which Aerospatiale Modification 03775 or Aerospatiale Modification 03776 has not been accomplished as of April 3, 2000: Prior to the accumulation of 18,000 total flight cycles, or within 1 month after April 3, 2000, whichever occurs later, replace the plug door stop fittings of the forward and aft passenger and service doors with new, improved fittings, in accordance with Avions de Transport Regional Service Bulletin ATR72-52-1033, dated April 28, 1995; or ATR72-52-1029, Revision 1, dated November 16, 1994; as applicable. Accomplishment of the replacement constitutes terminating action for the repetitive inspection requirements of paragraph (d)(1) of this AD.

(f) For airplanes on which Aerospatiale Modification 02986 (reference Avions de Transport Regional Service Bulletin ATR72-53-1021, Revision 1, dated February 20, 1995) has not been accomplished as of April 3, 2000: Prior to the accumulation of 18,000 total flight cycles, or within 1 month after April 3, 2000, whichever occurs later, perform a one-time eddy current inspection to detect cracks in the rivet holes of the door surround corners of the forward and aft passenger and service doors, in accordance with Avions de Transport Regional Service Bulletin ATR72-53-1021, Revision 1, dated February 20, 1995.

(1) If no crack is detected during the inspection required by paragraph (f) of this AD, prior to further flight, modify the rivet holes, and replace the door surround corners with modified corners, in accordance with the service bulletin.

(2) If any crack is detected during the inspection required by paragraph (f) of this AD, prior to further flight, repair and modify in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(g) For airplanes on which Aerospatiale Modification 02397 (reference Avions de Transport Regional Service Bulletin ATR72-53-1014, Revision 2, dated October 15, 1992) has not been accomplished as of April 3, 2000: Prior to the accumulation of 12,000 total flight cycles, or within 1 month after April 3, 2000, whichever occurs later, perform a one-time eddy current inspection to detect cracks of the rivet holes located on the left and right sides of external stringer 4 at frames 24 and 28 of the fuselage, in accordance with Avions de Transport Regional Service Bulletin ATR72-53-1014, Revision 2, dated October 15, 1992.

(1) If no crack is detected during the inspection required by paragraph (g) of this AD, prior to further flight, install reinforcement angles on the left and right sides of external stringer 4 at frames 24 and 28 of the fuselage, in accordance with the service bulletin.

(2) If any crack is detected during the inspection required by paragraph (g) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

(h) For airplanes on which Aerospatiale Modification 03185 (reference Avions de Transport Regional Service Bulletin ATR72-53-1020, dated October 6, 1992) has not been accomplished as of April 3, 2000: Prior to the accumulation of 12,000 total flight cycles, or within 1 month after April 3, 2000, whichever occurs later, perform a one-time eddy current inspection to detect cracks of the rivet holes located on stringer 11 of frame 26 of the fuselage, in accordance with Avions de Transport Regional Service Bulletin ATR72-53-1020, dated October 6, 1992.

(1) If no crack is detected during the inspection required by paragraph (h) of this AD, prior to further flight, install doublers and stringer clips on the left and right sides on stringer 11 of frame 26 of the fuselage, in accordance with the service bulletin.

(2) If any crack is detected during the inspection required by paragraph (h) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

Note 1: Inspections and repairs accomplished prior to the effective date of this AD in accordance with Avions de Transport Regional Service Bulletins ATR72-53-1013, dated June 10, 1991, or Revision 1, dated June 12, 1992; ATR72-53-1019, dated May 13, 1993, or Revision 1, dated November 11, 1994; ATR72-52-1029, dated July 20, 1994; or ATR72-53-1014, Revision 1, dated June 30, 1992; are considered acceptable for compliance with the applicable actions specified in this AD.

New Requirements of this AD

Inspection/Repair

(i) Prior to the accumulation of 27,000 total flight cycles, or within 30 days after the effective date of this AD, whichever is later; do the actions specified in paragraph (i)(1) or (i)(2) of this AD, as applicable.

(1) For airplanes on which Aerospatiale Modification 3191 and Aerospatiale Modification 3184 have not been accomplished as of the effective date of this AD: No further action is required by paragraph (i) of this AD.

(2) For airplanes on which Aerospatiale Modification 3191 has not been accomplished as of the effective date of this AD, and Aerospatiale Modification 3184 has been accomplished as of the effective date of this AD: Do a detailed inspection of the fastener holes at the hinge fitting of the cargo compartment doors to determine if the holes are oversized, and inspect the outer skin around the fastener holes for cracking, in accordance with the Accomplishment Instructions of Avions de Transport Regional Service Bulletin ATR72-52-1018, Revision 1, dated March 13, 2001.

Note 2: For the purposes of this AD, a detailed inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(j) Prior to further flight, repair any discrepancies detected during any inspection required by paragraph (i) of this AD in accordance with the Accomplishment Instructions of Avions de Transport Regional Service Bulletin ATR72-52-1018, Revision 1, dated March 13, 2001. Where the service bulletin specifies contacting the manufacturer for repair disposition, prior to further flight, repair in accordance with a method approved by the Manager, International Branch, ANM-116; or the DGAC (or its delegated agent).

Alternative Methods of Compliance

(k) In accordance with 14 CFR 39.19, the Manager, International Branch, ANM-116, is authorized to approve alternative methods of compliance for this AD.

Incorporation by Reference

(l) Unless otherwise specified in this AD, the actions shall be done in accordance with the applicable Avions de Transport Regional Service Bulletins, as listed in Table 1 of this AD:

TABLE 1.—SERVICE BULLETINS

Service bulletin	Revision level	Date
ATR72-52-1018	Original	May 18, 1995.
ATR72-52-1018	Revision 1	March 13, 2001.
ATR72-52-1028	Original	July 5, 1993.
ATR72-52-1029	Revision 1	November 16, 1994.
ATR72-52-1033	Original	April 28, 1995.
ATR72-53-1013	Revision 3	January 22, 1999.
ATR72-53-1014	Revision 2	October 15, 1992.
ATR72-53-1019	Revision 3	January 22, 1999.
ATR72-53-1020	Original	October 6, 1992.
ATR72-53-1021	Revision 1	February 20, 1995.

(1) The incorporation by reference of Avions de Transport Regional Service Bulletin ATR72-52-1018, Revision 1, dated March 13, 2001; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of the Avions de Transport Regional Service Bulletins listed in Table 2 of this AD was approved previously by the Director of the Federal Register as of April 3, 2000 (65 FR 10381, February 28, 2000):

TABLE 2.—PREVIOUSLY APPROVED SERVICE BULLETINS

Service bulletin	Revision level	Date
ATR72-52-1018	Original	May 18, 1995.
ATR72-52-1028	Original	July 5, 1993.
ATR72-52-1029	Revision 1	November 16, 1994.
ATR72-52-1033	Original	April 28, 1995.
ATR72-53-1013	Revision 3	January 22, 1999.
ATR72-53-1014	Revision 2	October 15, 1992.
ATR72-53-1019	Revision 3	January 22, 1999.
ATR72-53-1020	Original	October 6, 1992.
ATR72-53-1021	Revision 1	February 20, 1995.

(3) Copies may be obtained from Aerospatiale, 316 Route de Bayonne, 31060 Toulouse, Cedex 03, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 3: The subject of this AD is addressed in French airworthiness directive 2001-142-056(B), dated April 18, 2001.

Effective Date

(m) This amendment becomes effective on March 15, 2004.

Issued in Renton, Washington, on January 29, 2004.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 04-2586 Filed 2-6-04; 8:45 am]

BILLING CODE 4910-13-P